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- a voltage source delivering voltage of opposite polarity to adjacent contacts via the male and female electrical connectors, whereby the upper and lower surfaces of the corresponding bimorph reed are exposed to voltages of opposite polarity.
- 8. A Braille cell assembly comprising:
- a printed circuit board having opposing sides;
- a series of adjacent electrical contacts mounted to the printed circuit board, the adjacent electrical contacts being insulated from one another, a fulcrum point being 10 created between adjacent electrical contacts;
- a series of bimorph reeds, each bimorph reed including an upper and lower surface and being secured to a corresponding fulcrum point;
- a power source for delivering voltage of opposite polarity 15 to adjacent electrical contacts, whereby voltage of opposite polarity is delivered to the upper and lower surfaces of the corresponding bimorph reed via the corresponding fulcrum point.
- **9.** The Braille cell assembly as described in claim **8** further 20 comprising a series of stops formed on the printed circuit board for limiting the movement of the bimorph reeds.
- 10. The Braille cell assembly as described in claim 8 wherein the series of adjacent contacts are mounted in a staggered fashion.
- 11. The Braille cell assembly as described in claim 8 wherein each electrical contact is formed from a base portion, a support arm, and a biasing arm, the base portion of each contact being soldered to the printed circuit board, and wherein each fulcrum point is created between the biasing 30 arm of an upper contact and the support arm of a lower contact.
- 12. The Braille cell assembly as described in claim 11 wherein the biasing arms and support arms are electrodes that make an electrical connection to the upper and lower surfaces 35 of a corresponding bimorph reed.
- 13. A method for assembling a Braille cell assembly, the Braille cell assembly including a printed circuit board (PCB) having alignment apertures and a series of bimorph reeds, the method utilizing an alignment guide, the alignment guide

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having first and second surfaces that are angled with respect to each other, the second surface having a pair of alignment tabs and a peripheral edge, a series of contacts releasably secured to the peripheral edge of the alignment guide via a score line, each of the contacts formed from a base portion, a support arm, and a biasing arm, the method comprising the following steps:

positioning the alignment guide upon the printed circuit board by inserting the alignment tabs into the alignment apertures, whereby the series of contacts are aligned upon the PCB in a staggered relationship;

passing the PCB through an IR reflow solder process, whereby the base portion of each contact is soldered onto the PCB and the support arm and biasing arm of adjacent contacts form a fulcrum point;

separating the alignment guide from the soldered contacts by bending the alignment guide to break the score line; inserting each of the bimorph reeds into a corresponding fulcrum point created by adjacent contacts.

14. A method for assembling a Braille cell assembly, the Braille cell assembly including a printed circuit board (PCB) having an alignment aperture, the method utilizing an alignment guide, the alignment guide having first and second surfaces, the second surface having an alignment tab and a peripheral edge, a series of contacts releasably secured to the peripheral edge of the alignment guide, the method comprising the following steps:

positioning the alignment guide upon the printed circuit board by inserting the alignment tab into the alignment aperture, whereby the series of contacts are aligned upon the PCB:

soldering each contact onto the PCB;

separating the alignment guide from the soldered contacts.

- 15. The method as described in claim 14 wherein the soldering step is carried out by IR reflow soldering.
- **16**. The method as described in claim **14** comprising the further step of inserting each of the bimorph reeds into a corresponding fulcrum point created by adjacent contacts.

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